

# A Checklist of Mollusks for Puertecitos, Baja California, Mexico

BY

HELEN DUSHANE

Conchological Club of Southern California, Los Angeles 7, California

(1 Textfigure)

## Introduction

Puertecitos on the west shore of the Gulf of California is 180 miles south of the International Boundary, at Latitude 30° 25' N., Longitude 114° 39' W. It nestles between low, rocky promontories, and at each low tide the great rush of tidal bore drains away some 18 to 20 feet of water, leaving a rocky rubble area at one's feet and, beyond that, a muddy sand flat broken by runnels and drainage channels. The variety of molluscan life here includes Tagelus, Dosinia, Chione, plus Terebra and Oliva. On the coralline shelf are Trigonostoma and Strombina, while Mitra, Anachis, and various amphineurans hide under the boulders. The outer strand, at extreme low tide, offers such rarities as Terebra bridgesi and Clavus ianthe, while the rubble at the foot of the promontories shields Cypraea annettae, Trivia solandri, Lima orbigny, and L. pacifica.

This paper is intended to supply collectors with a working list and does not presume to be all-inclusive. The specimens include those taken by active collectors in an area of about five miles north to about five miles south of the tiny settlement of Puertecitos.

## Systematic Account

In this list the following format is adopted:

1. The species number given by Keen (1958) and the scientific name.
2. An asterisk (\*) preceding the Keen number indicates range extension.
3. Relative abundance or rarity; a number in parentheses indicates the number of persons known by me to have taken this species at Puertecitos.
4. The habitat of the specimen such as "sand beach, low tide" or "intertidally, under rocks".

5. Range extensions are noted, giving the most northerly previously recorded place of occurrence. It must be remembered that the northern limits for a species given in Keen (1958) are generalized and based upon admittedly incomplete lists. An attempt is made here to point out any extension of range from that reported in Keen's work.

6. The following individuals have made their collections available and are designated in the working list by initials:

Dr. Bruce Campbell	Ca
Emery Chace	Ch
Eugene Coan	Co
Joseph and Helen DuShane	D
Faye Howard	H
Dr. Homer King	K
Dr. Donald Shasky	Sh
Gale Sphon	Sp

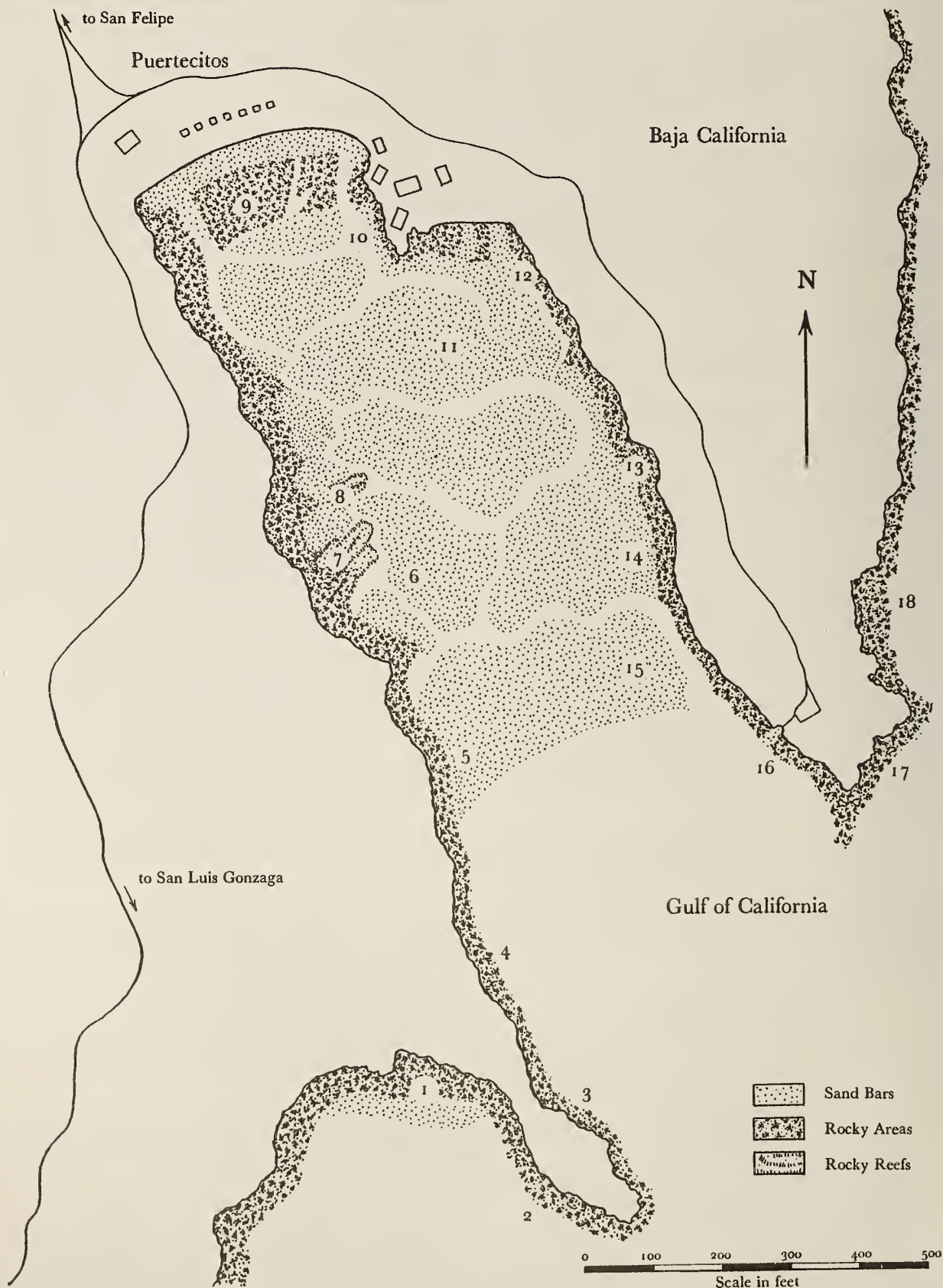
## Ecological Notes on Eighteen Collecting Areas as numbered on map (figure 1)

1. Shore is rocky with turnable-sized rocks that reveal Trivia solandri, Cypraea annettae, Pterynotus erinaceoides, small Turridae, and the common mollusks. At only a very low spring tide is a small sandbar exposed on which have been found Terebra berryi, T. variegata, Cancellaria obesa, and Strombus galeatus in shallow water.

2. Shore similar to (1) except rocks are larger and, in addition to the above, Coralliophila squamosa, Cymatium gibbosum, Heliacus bicaniculatus are encountered.

3. Shore of large rocks, cliffs, caves.

4. Medium-sized rocks with much plant growth. On this growth are found Mitra tristis, Parametaria duponti, Trivia solandri, Jenneria pustulata, Cypraea annettae, Arca pacifica, A.



mutabilis, Modiolus capax, Fusinus felipensis, F. ambustus, and at a very low tide the gorgonians are uncovered and Neosimnia and Cyphoma may be found.

5. This area consists of coarse sand and broken shells with draining runnels in which are found Olivella, Hormospira maculosa, Terebra berryi, and Conus ximenes.

6. Typical sandbar with Terebra variegata and Cassis centiquadrata.

7. An area of small tidepools with runnels and rocks on the reef. Shells found here are Trigonomostoma goniostoma, Muricanthus nigrinus, Hexaplex erythrostomus, Crassispira nymphia, C. grandimaculata, and others.

8. This is a small area of low lying rocky reefs from which come almost all of the borers, including Lithophaga, Petricola, and Gregariella.

9. Here are numerous small- and medium-sized rocks on which are Ostrea palmula. Under the rocks are O. angelica, Plicatula anomioides, Phenacolepas osculans, and Chitons, Tegulas, Acanthinas, and Pinnae.

10. Fair-sized sand flat that remains wet and yields Tagelus, Solen rosaceus, and Diplodontas.

11. Large sandbar that is exposed at almost all low tides and has the usual sand dwellers, such as Terebra variegata, Glycymeris, Trachycardium, Polinices, and Natica.

12. This is a good place to dig Semele, Diplodonta, and Protothaca.

13. A unique area because where the rocky shore meets the sand there is a zone of mud interspersed with rocks where Crassispira is found. Pitar concinnus occurs on the sandbar close by.

14. Sandy area where Terebra armillata, Olivella, Oliva, Donax gracilis, and D. navicula can be found.

15. On this sandbar, bare at low tide, are Terebra, Donax, Olivella fletcheri, O. dama, Oliva incrassata, Laevicardium elatum, Dosinia, and Polinices.

16. A rocky shore with medium- and large-sized rocks under which, or at night, may be found Acmaea, Turridae, Chitons, Trivia, and Cypraea.

17. Rocky shore with large rocks and sandy tidepools. Cassis coarctata has been taken here.

18. Medium-sized rocks in an exposed area. When the Gulf is rough, this is a very exposed area; therefore, only the hardier forms are found, such as Acmaea, Chitons, Nerita, and Acanthina.

### Acknowledgment

It takes many people to pursue a problem to its proper conclusion; therefore, my gratitude is extended to Dr. Bruce Campbell whose accurate map makes the area meaningful to the reader; to Dr. Donald Shasky, whose time and interest contributed materially to this paper; to Emery Chace, Eugene Coan, Faye Howard, Homer King, and Bruce Campbell for checklists that offered a working basis; to Gale Sphon, who not only made his collection available but gave unstintingly of his time to the manuscript; to Dr. Myra Keen, who identified troublesome specimens and is always a source of inspiration to the worker; and to Joseph DuShane, whose patient understanding has given me the time necessary for completion.

### Pelecypoda

- \*5 Nuculana costellata (Sowerby, 1833); rare (1), sand beach, low tide, Santa Inez Bay south (Ch).
- 12 Nuculana impar (Pilsbry & Lowe, 1932); rare (2), sand beach (Sh, D).
- 36 Arca mutabilis (Sowerby, 1833); common under rocks, low tide (Sh, D, Sp, Co, K, Ch, Ca, H).
- 37 Arca pacifica (Sowerby, 1833); common around rocks, intertidally (Sh, D, Sp, Co, K, Ch, Ca, H).
- 38 Arca lurida (Sowerby, 1833); one valve (H).
- 39 Barbatia bailyi (Bartsch, 1931); one valve (H).
- 40 Barbatia gradata (Broderip & Sowerby, 1829); (H).
- 43 Barbatia reeveana (Orbigny, 1846); common intertidally (Sh, D, Sp, Co, K, Ch, Ca, H).
- \*44 Barbatia illota (Sowerby, 1833); common attached to rocks, intertidally, Angel de la Guarda Island south to Peru (Sh, D, Sp, Co, K, Ch, Ca, H).
- 46 Arcopsis solida (Sowerby, 1833); common attached to rocks, intertidally (Sh, D, Co, K, Ch, Ca, H).
- 57 Anadara multcostata (Sowerby, 1833); rare (4), on sandbar, low tide (Sh, Sp, Co, K).



- \*69 Noetia reversa (Sowerby, 1833); low tide, around rocks, rare (2), Concepción Bay south (K, Ch).  
Glycymeris sp.; around rocks, low tide, rare (1) (Ca).
- 75 Glycymeris maculata (Broderip, 1832); sand beach, uncommon (Sh, D, Sp, K, Ca, H).
- 76 Glycymeris multicostata (Sowerby, 1833); uncommon, sand beach (Sh, K, Ch, H).
- 80 Brachidontes multiformis (Carpenter, 1855); uncommon, attached to rocks and rubble, low tide (Sh, Sp, Co, H).
- 83 Hormomya adamsiana (Dunker, 1857); intertidally among rubble, common (Sh, D, Ch, H).
- 85 Mytella guyanensis (Lamarck, 1819); among rocks in sand, rare (1) (H).
- 86 Mytella speciosa (Reeve, 1857); (Ch).
- 90 Lithophaga aristata (Dillwyn, 1817); in Spondylus calcifer, common (Sh, K, Ch, Ca, H).
- 91a Lithophaga attenuata rogersi Berry, 1957; boring into coralline rubble, common (Sh, D, Sp, K, Ch, Ca, H).
- 94 Lithophaga plumula (Hanley, 1843); (Sh, Sp, Ca).
- 95 Lithophaga spatiosa (Carpenter, 1856); common (Sh, Sp, K, Ch, H).
- 98 Gregariella coarctata (Carpenter, 1856); boring into reef (Ch, H, Ca).
- 101 Modiolus capax (Conrad, 1837); attached to rocks, intertidally, common (Sh, D, Co, K, Ch, H).
- 106 Lioberus salvadoricus (Hertlein & Strong, 1946); attached to rocks, intertidally (Sh, Ch, Ca).
- 107 Pteria sterna (Gould, 1851); (K, H, Ca).
- 108 Pinctada mazatlanica (Hanley, 1856); (H).
- \*110 Vulsella pacifica Dall, 1916; rare (1) Nicaragua (Ch).
- \*111 Pinna rugosa Sowerby, 1835; tip of Baja California to Panama (Sp, K, Ch, Ca, H).
- 112 Atrina maura (Sowerby, 1835); between rocks, low tide, juveniles (Sh, K, Ca).
- 113 Atrina tuberculosa (Sowerby, 1835); (Sp, H).
- 115 Isognomon chemnitzianus (Orbigny, 1853); attached to rocks, intertidally, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 116 Isognomon janus Carpenter, 1856; attached to rocks, intertidally, uncommon (Sh, D, Co, K, Ch, Ca, H).
- 117 Ostrea angelica Rochebrune, 1895; on rocks, intertidally, uncommon (K, Ch, Ca).
- 119 Ostrea cf. O. conchaphila Carpenter, 1856; on rocks, low tide, rare (1) (Ch).
- 124 Ostrea palmula Carpenter, 1856; on rocks exposed to surf, common (Sh, D, Sp, Co, K, Ca).
- 126 Pecten vogdesi Arnold, 1906; beach valves (D, Co, K, Ca).
- 132 Aequipecten circularis (Sowerby, 1835); sand beach, juveniles, common (Sh, D, Sp, Co, K, Ch, H).
- 141 Lima hemphilli Hertlein & Strong, 1946; rare (1) (H).
- 142 Lima orbigny Lamy, 1930; under boulders, low tide, uncommon (D, Ch, Ca).
- 144 Lima pacifica Orbigny, 1846; under boulders, low tide, not uncommon (Sh, D, Sp, Co, H).
- 145 Spondylus princeps Broderip, 1833; rare (1) (H).
- 146 Spondylus calcifer Carpenter, 1856; below low-tide level (Sh, D).  
Spondylus ursipes Berry, 1959; below low-tide level, rare (1) (H).
- 147 Plicatula anomioides Keen, 1958; attached to flat rocks, intertidally, common (Sh, D, Sp, K, Ch, Ca, H).
- 148 Plicatula inezana Durham, 1950; attached to flat rocks, low tide, rare (1) (Co).
- 150 Plicatula spondyloopsis Rochebrune, 1895; rare (1) (H).
- 152 Anomia peruviana Orbigny, 1846; attached to Donax, intertidally, uncommon (K).
- 159 Crassinella pacifica (C. B. Adams, 1852); living specimens from siftings 5 to 10 feet below low tide (Sh).
- 162-2 Cardita affinis californica Deshayes, 1854; attached to rocks, low tide, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 167 Cardita cf. C. radiata Sowerby, 1833; under rocks, attached by byssus, low tide (D).
- 185 Lucina lampra (Dall, 1901); intertidally, 6 to 18 inches in sand with Tagelus californianus, uncommon (Ch, Ca, H).
- 187 Lucina prolongata Carpenter, 1855; intertidally (H).
- 200 Codakia distinguenda (Tryon, 1872); freshly dead in pairs, sandy drainage channels and in octopus holes, common (Sh, D, Sp, Ch, Ca, H).
- 201 Ctena chiquita (Dall, 1901); rare (1) (H).
- 205 Ctena mexicana (Dall, 1901); low tide, sand beach, common (Sh, Sp, Co, K, Ch, Ca, H).
- 206 Divalinga eburnea (Reeve, 1850); dead valves on beach near high-tide level, rare (1) (Ca).
- \*208 Diplodonta inezensis (Hertlein & Strong, 1947); rare (1), Santa Inez Bay (Ch).

- 209 Diplodonta orbellus (Gould, 1851); sandy nests under rocks, intertidally, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 212 Diplodonta sericata (Reeve, 1850); under rocks, intertidally, common (Sh, D, Co, K, Ch, H).
- \*213 Diplodonta caelata (Reeve, 1850); rare (1), Sihuatanejo, Mexico, south to Ecuador (H).
- 214 Diplodonta semirugosa Dall, 1899; out of Chama buddiana (Co, H).
- 218 Basterotia peninsularis Jordan, 1936; dead specimen (Ch).
- 221 Ensitellops hertleini Emerson & Puffer, 1957; rare (1) (H).
- 236 Solecardia eburnea Conrad, 1849; intertidally, uncommon, valves only (K, Ch, Ca).
- 237 Sportella stearnsii Dall, 1899; living on sea cucumbers (holothuria), rare (1) (Ca).
- 238 Chama buddiana C. B. Adams, 1852; attached to rocks, intertidally, common (Sp, D, Co, K, Ch, H).
- 241 Chama sordida Broderip, 1835; attached to rocks, rare (1) (H).
- 242 Chama squamuligera Pilsbry & Lowe, 1932; attached to rocks, intertidally, rare (1) (H).
- 248 Pseudochama saavedrai Hertlein & Strong, 1946; attached to conglomerate, low tide, rare (2) (D, Ch).
- 252 Trachycardium panamense (Sowerby, 1833); muddy sand beach, low tide, common (Sh, D, Co, K, Ch, Ca, H).
- 255 Papyridea aspersa (Sowerby, 1833); muddy sand beach, low tide, common (Sh, D, Sp, Co, K, Ch).
- 256 Trigoniocardia granifera (Broderip & Sowerby, 1829); mud flats, low tide, uncommon (Sh, D, H).
- 258 Trigoniocardia biangulata (Broderip & Sowerby, 1829); intertidally, common (Sh, D, Sp, K, Ch).
- 262 Laevicardium elatum (Sowerby, 1833); sand beach, low tide, uncommon (Sh, Sp, Co, K, Ca).
- 263 Laevicardium elenense (Sowerby, 1840); muddy sand beach and sandbars, low tide, common (Sh, D, K, Ch, Ca).
- \*270 Gouldia californica Dall, 1917; rare (1) La Paz to Panama (Ch).
- 273 Tivela byronensis (Gray, 1838); sand beach, intertidally, common (Sh, D, Sp, Co, Ch, Ca, H).
- 280 Transennella puella (Carpenter, 1864); uncommon, sand beach, low tide (D). Transennella sp. (Ch).
- 286 Pitar newcombianus (Gabb, 1865); sand beach, low tide, uncommon (Sh, Ch).
- 291 Pitar pollicaris (Carpenter, 1864); low tide, rare (1) (Sp).
- 296 Pitar concinnus (Sowerby, 1835); sand beach, intertidally, fairly common (Sh, K, Ch, Ca, H).
- 298 Pitar tortuosus (Broderip, 1835); sand beach, uncommon (D, K, Ch).
- 303 Megapitaria squalida (Sowerby, 1835); muddy sand beach, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 306 Dosinia ponderosa (Gray, 1838); muddy sand beach, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 318 Chione californiensis (Broderip, 1835); muddy sand beach, common (D, H).
- 319 Chione compta (Broderip, 1835); dead valves on sand beach (D).
- \*320 Chione guatulcoensis Hertlein & Strong, 1948; intertidally, sand beach, rare (1), Port Guatulco, Mexico, to Panama Bay (Ch).
- 321 Chione undatella (Sowerby, 1835); intertidally, sand beach, common (Sh, D, Sp, Co, Ch, H).
- 323 Chione fluctifraga (Sowerby, 1853); sand beach, dead valve (D).
- 326 Chione gnidia (Broderip & Sowerby, 1829); intertidally, muddy sand, uncommon (H).
- 327 Chione pulicaria (Broderip, 1835); intertidally, sand beach, common (Sp, D, K, Ch, Ca).
- 328 Chione purpurissata Dall, 1902; intertidally, rare (1) (H).
- 331 Chione mariae (Orbigny, 1846); low tide, sand beach, rare (4) (Sh, Sp, Ch, H).
- 335 Chione picta Willett, 1944; low tide, sand beach, rare (4) (Sh, Sp, Ch, H).
- \*337 Anomalocardia subimbricata tumens (Verrill, 1870); low tide, sandbars, rare (2), southern part of the Gulf of California (D, H).
- 340 Protothaca grata (Say, 1831); muddy sand and rubble, intertidally, common (Sh, D, Sp, Co, Ch, Ca, H).
- 341 Protothaca asperrima (Sowerby, 1835); sand beach and rubble, intertidally, uncommon (D, K, Ca).
- 345 Petricola lucasana Hertlein & Strong, 1948; in crevices, common (Sh, D, K, Ch, H, Ca).
- \*347 Petricola denticulata Sowerby, 1834; on reef with Lithophaga, rare (2), La Paz to Peru (K, H).
- 348 Petricola parallela Pilsbry & Lowe, 1932; valves on beach (Ch).



- 349 Petricola robusta Sowerby, 1834; boring in clay (Ch).  
Petricola botula Olsson, 1961; one complete dead specimen (Ca).
- 352 Cooperella subdiaphana (Carpenter, 1864); sand beach, intertidally (Sp, Ch).
- 355 Mactra dolabriformis (Conrad, 1867); muddy sand flat (Sp, D, Ca, H).
- 356 Mactra nasuta Gould, 1851; intertidally, rare (1) (Sp).
- 376 Tellina inaequistriata Donovan, 1802; sand beach, rare (1) (Ch).
- \*381 Tellina prora Hanley, 1844; muddy sand, low tide, rare (1), La Paz to Ecuador (D).
- \*383 Tellina rubescens Hanley, 1844; intertidally, rare (1), Tenacatita Bay, Mexico, to Peru (H).
- 384 Tellina simulans C. B. Adams, 1852; muddy sand, low tide, uncommon (D, K).
- 387 Tellina cristallina Spengler, 1798; one valve, rare (H).
- 389 Tellina meropsis Dall, 1900; muddy sand, low tide, rare (K, Ch).
- 393 Tellina arenica Hertlein & Strong, 1949; rare (Ch).
- \*398 Tellina guaymasensis Pilsbry & Lowe, 1932; muddy sand, low tide, rare (1), Guaymas, Mexico (Ch).  
Tellina, a new species, to be described by Dr. Myra Keen; sand beach, uncommon (D).  
Macoma indentata Carpenter, 1864; rare (H).
- \*435 Macoma cf. M. mazatlanica (Deshayes, 1855); rare (1), Mazatlán (Sh).
- 436 Macoma pacis Pilsbry & Lowe, 1932; sand beach, low tide, uncommon (D, Ch, Ca, H).
- 439 Strigilla costulifera (Mörch, 1860); rare (2) (Sh, Ca).
- 441 Strigilla lenticula Philippi, 1846; intertidally, sand beach, rare (1) (D).
- 450 Donax gracilis Hanley, 1845; common, sand flats (Sh, D, Sp, Co, Ca).
- 451 Donax navicula Hanley, 1845; intertidally, sand flats, common (Sh, D, Sp, K, Ch, Ca, H).
- 462 Sanguinolaria tellinoides A. Adams, 1850; rare (1) (H).
- 467 Heterodonax bimaculatus (Linnaeus, 1758); uncommon (Sh, H).
- 471 Tagelus californianus (Conrad, 1837); mud flats, actively burrowing, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 472 Tagelus violascens (Carpenter, 1855); mud flats, rare (1) (Ch).
- 477 Semele bicolor (C. B. Adams, 1852); mud flats, rare (2) (Ch, Ca).
- 481 Semele flavescens (Gould, 1851); under rocky rubble, low tide, common (Sh, D, Sp, K, Ch, Ca).
- 482 Semele formosa (Sowerby, 1832); rare (1) (K).
- 483 Semele guaymasensis Pilsbry & Lowe, 1932; rocky rubble, low tide, uncommon (Sh, D, Ch).
- 508 Cumingia lamellosa Sowerby, 1833; nestling in rock crevices, intertidally, uncommon (Sh, Ca).
- \*512 Solen cf. S. mexicanus Dall, 1899; rare, Gulf of Tehuantepec, Mexico, to Nicaragua (K).
- 516 Solen rosaceus Carpenter, 1864; intertidally, in runnels, rare (2) (D, Ca).
- 518 Ensis californicus Dall, 1899; intertidally, in runnels, rare (2) (D, K).
- 521 Sphenia fragilis Carpenter, 1856; nestling in cavities and holes (D, Ch, H).
- 523 Corbula bicarinata Sowerby, 1833; around rocks, low tide, fairly common (Sh, D, Sp, Ch, Ca).
- 524 Corbula biradiata Sowerby, 1833; around rocks, intertidally (Ch, Ca).
- 525 Corbula cf. C. luteola Carpenter, 1864; in dead Semele flavescens, sand beach (D).
- 527 Corbula nasuta Sowerby, 1833; around rocks, intertidally, uncommon (Sh, Ch).
- 538 Corbula tenuis Sowerby, 1833; in beach drift (H).
- 542 Hiatella arctica (Linnaeus, 1767); in rocky crevices, intertidally (Sh, Co, Ch).
- 546 Pholas chiloensis Molina, 1782; beach specimen (Ch).
- 553 Diplothyra curta (Sowerby, 1834); rare (1) (H).
- 573 Pandora granulata Dall, 1915; (Sh).
- 578 Lyonsia gouldii Dall, 1915; sand beach, low night tide, uncommon (Sh, D, Ch).
- 579 Lyonsia inflata Conrad, 1837; in crevices, rocky reef, uncommon (Sh, D).
- 585 Periploma planiusculum Sowerby, 1834; low tide, uncommon (Sh).
- 589 Thracia curta Conrad, 1837; dead valve (K).

## Scaphopoda

- 2 Dentalium inversum Deshayes, 1826; beach specimen (Ch, Ca).  
Dentalium sp.; alive on sand beach (Ca).  
Dentalium sp.; in sand near boulder, low tide, beach specimen, rare (D).
- 12 Cadulus panamensis Pilsbry & Sharp, 1897; below low-tide level (Ch).

## Gastropoda

- Acmaea acutapex* Berry, 1960; common on rocks at mid-tide level (D, Sp, K, Ch).
- \*5 *Acmaea filosa* Carpenter, 1865; rare (1), El Salvador to Panama (H).
- 7 *Acmaea mitella* Menke, 1847; among big barnacles (H).
- 7a *Acmaea mitella fayae* Hertlein, 1958; mid-tide level, rare (2) (D, Sp).
- 12a *Acmaea strongiana* Hertlein, 1958; on rocks at mid-tide level, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 14 *Acmaea turveri* Hertlein & Strong, 1951; on rocks at high-, mid-tide level, common (Sh, Sp, K, Ch, Ca, H).
- 16 *Nomaeopelta dalliana* (Pilsbry, 1891); mid-tide level, common (Sh, D, Sp, Co, K, Ch, Ca, H).  
*Nomaeopelta goodmani* Berry, 1960; high-tide level, uncommon (topotypes) (D, Sp, K, Ch, Ca, H).
- 18 *Nomaeopelta stanfordiana* (Berry, 1957); mid-tide level, common (Sh, D, Sp, K, Ch, Ca).
- \*28 *Lucapinella aequalis* (Sowerby, 1835); uncommon, Port Guatulco, Mexico, to Ecuador (D, H).  
*Lucapinella milleri* Berry, 1960; rare (1) (Ch).
- \*30 *Diodora alta* (C. B. Adams, 1852); mid-tide level, common (Sh, D, Sp, Co, K, Ch, Ca, H).  
*Diodora constantiae* Kanakoff, 1953; under boulders, rare (1) (H).
- 32 *Diodora inaequalis* (Sowerby, 1835); mid-tide level, under rocks (Sh, D, Sp, Co, K, Ch, Ca, H).
- \*33 *Diodora panamensis* (Sowerby, 1835); rare (1), on rocks, Panama (Ch).
- 34 *Diodora saturnalis* (Carpenter, 1864); mid-tide level, on rocks, rare (2) (Sh, D).
- 41 *Calliostoma eximium* (Reeve, 1843); under rocks, mid-tide level, rare (2) (Sp, K).
- 45 *Calliostoma marshalli* Lowe, 1935; under rocks, mid-tide level, rare (2) (Sh, Ch).
- 47 *Calliostoma palmeri* Dall, 1871; beach specimen (D).
- 52 *Tegula globulus* (Carpenter, 1856); under and on rocks, high-tide level, common (Sh, Co, Ch).
- 53 *Tegula ligulata* (Menke, 1850); on rocks, rare (1) (Ch).
- 54 *Tegula mariana* Dall, 1919; under and on rocks, high-tide level, common (Sh, D, Sp, Co, K, Ch).
- 58 *Tegula rugosa* (A. Adams, 1853); on rocks, high-tide level, common (Sh, D, Sp, Co, K, Ch).
- 64 *Turbo fluctuosus* Wood, 1828; among stones, mid-tide level, common (Sh, D, Sp, Co, K, Ch, Ca).
- \*67 *Turbo saxosus* Wood, 1828; juveniles only, Los Angeles Bay, Gulf of California, to Peru (Ch).  
*Liotia acuticostata* Carpenter, 1864; beach specimen (Ch).  
*Liotia carinata* Carpenter, 1864; (Ch).  
*Liotia rammata* Dall, 1918; (Ch).  
*Tricolia substriata* (Carpenter, 1864); under rocks (D, Ch).
- 81 *Nerita scabricosta* Lamarck, 1822; high-tide level, common (Sh, D, Sp, Co, K, Ca, H).
- 82 *Nerita funiculata* Menke, 1851; on rocks, intertidally, common (Sh, Sp, Co, K, Ch, Ca).
- 85 *Phenacolepas malonei* Vanatta, 1912; on rocks, intertidally, rare (3) (Sp, Co, Ch).
- 86 *Phenacolepas osculans* (C. B. Adams, 1852); on rocks, intertidally, rare (2) (Sh, D).  
*Eulima* sp.; dead specimen (D).  
*Balcis* sp.; two species (Sh).
- 98 *Epitonium vivesi* Hertlein & Strong, 1951; rare (1) (Sh).
- 99 *Epitonium walkerianum* Hertlein & Strong, 1951; under rocks, rare (2) (Sh, D).
- \*113 *Epitonium* cf. *E. colpoicum* Dall, 1917; under rocks, rare (1), La Paz to Panama (D).
- 121 *Epitonium hexagonum* (Sowerby, 1844); rare (2) (Ca, H).
- 124 *Epitonium oerstedianum* Hertlein & Strong, 1951; rare (1) (H).
- \*158 *Opalia diadema* (Sowerby, 1832); under rocks, low tide, rare (1), Mazatlán, Mexico, to Galapagos Islands (D).
- 165 *Opalia retiporosa* (Carpenter, 1864); rare (2) (Sp, Ch).
- 175 *Littorina dubiosa penicillata* Carpenter, 1864; common on rocks at splash zone (Sh, D, Sp, Co, Ch, Ca, H).  
*Cyclostremiscus granti* Baker, Hanna, & Strong, 1938; in siftings, 5 to 10 feet below low-tide level, one specimen (Sh).  
*Macromphalina* sp.; in siftings, 5 to 10 feet below low-tide level (Sh).



- Chonebasis symmetrica Pilsbry & Olsson; below low-tide level (H).  
Solariorbis sp.; in siftings, 5 to 10 feet below low-tide level (Sh).  
Teinostoma amplexans Carpenter, 1857; sand beach, just below low-tide level (Sh, D, H).  
Teinostoma sp.; (H).  
Vitrinella sp.; sand beach, just below low-tide level (Sh, Co).  
Assimineae sp. (Sh).  
Rissoina burragei Bartsch, 1915 (D, Ch).  
Rissoina firmata C. B. Adams, 1852 (H).  
Rissoina or Rissoella (Sh).  
Rissoina woodwardii Carpenter, 1856; just below low-tide level, sand beach (Sh).  
Barleeia sp. (Ch).
- 180 Turritella anactor Berry, 1957; sand beach, low tide, uncommon; all beach specimens (D, Co, Ch, Ca).
- 189a Vermicularia pellucida eburnea (Reeve, 1842); among rubble, low tide, good specimens uncommon (D, Co, Ch, Ca).
- 191 Architectonica nobilis Röding, 1798; beach specimens, rare (2) (D).
- 193 Heliacus bicanaliculatus (Valenciennes, 1832); intertidally, in runnels, uncommon (D, K, Ch).
- \*194 Heliacus planispira Pilsbry & Lowe, 1932; extreme low tide, Panama (Sh).  
Caecum sp.; in siftings, 5 to 10 feet below low-tide level (Sh, H).  
Elephantanellum, two species; in siftings, 5 to 10 feet below low-tide level (Sh, H).  
Elephantulum sp.; in dead Semele flavescens, common (D, Ch).  
Elephantulum sp.; in siftings, 5 to 10 feet below low-tide level (Sh, D).  
Fartulum sp.; in siftings, 5 to 10 feet below low-tide level (Sh, D, H).  
Micranellum sp.; in dead Semele flavescens (D, H).
- 196 Modulus cerodes (A. Adams, 1851); muddy sand flats, uncommon (Sp).
- 197 Modulus disculus (Philippi, 1846); on muddy coralline reef, common (D, Sp, Co, K, Ch, Ca).
- 198 Vermetus centiquadrus Valenciennes, 1846; on rocks, fairly common (K, Ca).
- 201 Vermetus indentatus (Carpenter, 1856); among rocks, mid-tide, uncommon (K, Ca, H).
- 203 Petalocochus macrophragma Carpenter, 1856; among rocks, mid-tide, rare (2) (Ch, Ca).
- 211 Cerithium maculosum Kiener, 1841; on rocky reef, intertidally, uncommon (K, Ca).
- 214 Cerithium sculptum Sowerby, 1855; under rocks, intertidally, common (Sh, D, Sp, Co, K, Ch, Ca).
- 215 Cerithium stercusmuscarum Valenciennes, 1833; muddy sand flats, intertidally, common (Sh, D, Co, K, Ch, Ca).  
Triphora, three species (Sh, D).  
Triphora contrerasi Baker, 1926 (Ch).  
Bittium sp. (D).  
Cerithiopsis bristolae Baker, Hanna, & Strong, 1938; (Sh).  
Cerithiopsis sp. (Sh, D, Ch).  
Seila assimilata C. B. Adams, 1852; sand beach, low tide (Sh, Ch).  
Alaba jeannettae Bartsch, 1911 (Ch, H).  
Alabina diomedae Bartsch, 1911 (Sh).  
Alabina tenuisculpta Carpenter, 1864; (Ch).
- 219 Cerithidea albonodosa Gould & Carpenter, 1857; muddy sand, high-tide level, uncommon (K, Ca).
- 225 Hipponix antiquatus (Linnaeus, 1767); on rocks, intertidally, common (Sh, D, Ch).
- 227 Hipponix pilosus (Deshayes, 1832); on rocks, intertidally, common (Sp, D, Co, K, Ch, Ca).  
Fossarus anglostoma C. B. Adams, 1852; (H).  
Fossarus megasoma C. B. Adams, 1852; (H).  
Fossarus cf. F. tuberosus Carpenter, 1857; under rocks, intertidally, rare (1) (Sh).  
Iselica sp.; sand beach, low tide (Sh, D, Sp).
- 230 Vanikoro aperta (Carpenter, 1864); rare (1), Cape San Lucas, Baja California (H).  
Vanikoro sp. (Ch).
- 233 Calyptraea mamillaris Broderip, 1834; attached to rocks and other shells, intertidally, fairly common (D, K, Ch, Ca).
- 237 Cheilea cepacea (Broderip, 1834); rare (Ch).
- 240 Crepidula arenata (Broderip, 1834); on dead shells, intertidally, not common (D).
- 241 Crepidula excavata (Broderip, 1834); on other shells, low tide, uncommon (D, Ch).
- 242 Crepidula incurva (Broderip, 1834); on dead shells, common (Sh, D, Sp, Co, K, Ch, H).
- \*243 Crepidula lessonii (Broderip, 1834); under stones, intertidally, rare, Oaxaca, Mexico, to Peru (D).
- 245 Crepidula onyx Sowerby, 1824; common, especially on Cypraea annettae, low tide (D, K, H).



- 246 Crepidula perforans (Valenciennes, 1846); in pholad holes, uncommon (Co, Ch).
- 248 Crepidula striolata Menke, 1851; attached to underside of stones, intertidally, common (Sh, D, Sp, Co, K, Ch).
- 249 Crepidula uncatata Menke, 1847; attached to gorgonians and dead shells, rare (Sh, H).
- 252 Crucibulum scutellatum (Wood, 1828); on rocky reefs, intertidally, uncommon (D, Sp, K, Ch).
- 254 Crucibulum spinosum (Sowerby, 1824); on dead shells and rocks, intertidally, uncommon (D, Sp, Co, K, Ch, Ca).
- 258 Natica chemnitzii Pfeiffer, 1840; sand flats, low tide, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 266 Polinices bifasciatus (Gray, 1834); sand flats, low tide, common (Sh, D, Sp, Co, K, Ca, H).
- 272 Polinices uber (Valenciennes, 1832); sand flats, low tide, common (Sh, D, Sp, Ch, Ca, H).
- 274 Polinices reclusianus (Deshayes, 1839); sandbars, intertidally, common (Sh, D, Co, K, Ch, Ca, H).
- 275 Sinum cf. S. debile (Gould, 1853 [1852]); on tide flats, low tide, rare (Sh).
- \*280 Lamellaria inflata (C. B. Adams, 1852); near boulder, brown soft parts, rare (1), Panama (D).
- 287 Cypraea annettae Dall, 1909; under rocks, low tide, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 289 Erato columbella Menke, 1847; under rocks, low tide, rare (Ch).
- 296 Trivia californiana (Gray, 1828); on boulders, low tide, dead specimens only (D, K).
- 299 Trivia solandri (Sowerby, 1832); on boulders, low tide, uncommon (Sh, D, Sp, Co, Ch, Ca, H).
- \*300 Jenneria pustulata (Solander, 1786); under and on rocks, low tide, rare, southern end of Gulf of California to Ecuador (Sh, D, Sp, Ca).
- \*301 Cyphoma emarginatum (Sowerby, 1830); on gorgonians, rare, Mazatlán, Mexico, to Ecuador (Sh, Ca).
- 305 Neosimnia quaylei (Lowe, 1935); on gorgonians, shallow water (Sh, D, Sp, K, Ca).
- 307 Strombus galeatus Swainson, 1823; muddy runnels, around rocks, low tide, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 308 Strombus gracilior Sowerby, 1825; muddy sand flats, low tide, common (Sh, D, Sp, Co, K, Ch, H).
- 309 Strombus granulatus Swainson, 1822; around rocks, in runnels, uncommon (Sh, D, K, Ca, H).
- \*313 Cassis coarctata Sowerby, 1825; rare, among boulders, La Paz, Gulf of California, to Ecuador (Ca).
- 315 Cassis centiquadrata (Valenciennes, 1832); around rocks and on sandbars at very low tide, uncommon (Sp, Ch).
- 317 Ficus ventricosa (Sowerby, 1825); beach specimens and dredged by shrimp boats (K, Ca).
- 324 Cymatium gibbosum (Broderip, 1833); under rocks, intertidally, uncommon (Sh, D, Sp, Ch).
- 335 Murex elenensis Dall, 1909; dead specimens on beach (Sh, K, Ca, H).
- 339 Hexaplex erythrostomus (Swainson, 1831); juveniles on and around rocks and on rocky reefs, adults at low tide on sand beach, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 344 Muricanthus nigrinus (Philippi, 1845); uncommon except as juveniles among rocks, low tide (Sh, D, Co, K, Ch, Ca, H).
- 348 Pterynotus erinaceoides (Valenciennes, 1832); among rocks, low tide, common (Sh, D, Sp, K).
- 358 Ocenebra parva (E. A. Smith, 1877); between rocks, low tide, rare (1) (D).
- 367 Muricopsis armatus (A. Adams, 1854); beach specimen (Ca).
- \*369 Muricopsis zeteki Hertlein & Strong, 1951; under rocks, low tide, uncommon, Mazatlán, Mexico, to Panama (Sh, D, Sp).
- 387 Coralliophila costata (Blainville, 1832); coral reef, low tide, uncommon (Sh, D, Sp).
- 388 Coralliophila hindsii (Carpenter, 1857); beach specimen (Ch).
- 389 Coralliophila squamosa (Broderip, 1833); under rocks, low tide, rare (1) (Sp).
- 398 Thais biserialis (Blainville, 1832); under rocks, intertidally, rare (2) (Sp, Ca).
- 404 Acanthina angelica I. Oldroyd, 1918; mid-tide level, common (Sh, Sp, Co, K, Ch, Ca, H).
- 409 Acanthina tuberculata (Sowerby, 1835); on rocks, intertidally, common (Sh, D, Co, K, Ch, H).
- 411 Morula ferruginosa (Reeve, 1846); under rocks, intertidally, common (Sh, D, Sp, Co, K, Ch, H).
- 412 Morula lugubris (C. B. Adams, 1852); under rocks, uncommon (Sh, D).

- 424 Anachis coronata (Sowerby, 1832); under rocks, intertidally, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 429 Anachis diminuta (C. B. Adams, 1852); on rocks, low tide, uncommon (Sh, D, Ca).
- \*437 Anachis hilli Pilsbry & Lowe, 1932; under rocks, intertidally, uncommon, Sonoran coast of Mexico to Nicaragua (Sh, D, Sp, Co, Ca, H).
- 444 Anachis nigricans (Sowerby, 1844); under rocks, intertidally, uncommon (Sh, D, Sp, K, Ca, H).
- 454 Anachis sanfelipensis Lowe, 1935; under rocks, intertidally, common (Sh, D, Sp, Co, K, Ch, Ca).
- 455 Anachis scalarina (Sowerby, 1832); under rocks, intertidally, common (Sh, D, Ca).
- 464 Anachis varia (Sowerby, 1832); under rocks, intertidally, common (Sh, D, Sp, Co, K, Ch, Ca).
- 470 Cosmioconcha palmeri (Dall, 1913); under rocks, rare (1) (D).
- \*478 Mitrella dorma Baker, Hanna, & Strong, 1938; under rocks, low tide, uncommon, southern part of Gulf of California (Sh, D, Sp).
- 480 Mitrella granti Lowe, 1935; under rocks, low tide, rare (2) (Sh, Sp).
- \*482 Mitrella lalage Pilsbry & Lowe, 1932; on rocks, extreme low tide, uncommon, southern part of Gulf of California (D, Ch).
- 483 Mitrella millepunctata (Carpenter, 1864); on rocks, extreme low tide, rare (2) (D, Sp).
- 484 Mitrella ocellata (Gmelin, 1791); under rocks, intertidally, common (Sh, D, Sp, Co, Ch).  
Nassarina, probably a new species; in siftings from 5 to 10 feet below low-tide level (Sh).
- 494 Parametaria dupontii (Kiener, 1849-50); under rocks, intertidally, common (Sh, D, Sp, Co, K, Ch, Ca).
- 497 Pyrene fuscata (Sowerby, 1832); under rocks, intertidally, common (Sh, D, Sp, Co, K, Ch, Ca).
- 515 Strombina maculosa (Sowerby, 1832); muddy sand, among rocks, uncommon (D, Sp, K, Ca).
- 541 Cantharus capitaneus (Berry, 1957); beach specimen (Ch, Ca).
- 543 Cantharus macrospira (Berry, 1957); muddy sand (Sh, Sp, Co, Ch, Ca).
- \*551 Engina solida (Dall, 1917); under rocks, low tide, rare, La Paz, Gulf of California to Acapulco, Mexico (Sh, D, Ca).
- \*586 Nassarius taeniolatus (Philippi, 1845); rare, around and under rocks, Acapulco, Mexico, to Chile (Sh).
- 587 Nassarius versicolor (C. B. Adams, 1852); around rocks and on sand flats as tide recedes, common (Sh, D, Sp, Co, Ca, H).
- 591 Nassarius iodes (Dall, 1917); around rocks as tide recedes, common (D, Co, K, Ch).
- 592 Nassarius luteostoma (Broderip & Sowerby, 1829); around rocks as tide recedes, uncommon (D, K).
- 593 Nassarius moestus (Hinds, 1844); around rocks as tide recedes, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 595 Nassarius tiarula (Kiener, 1841); around rocks as tide recedes, common (Sh, D, Sp, K, Ch).
- 612 Fusinus ambustus (Gould, 1853 [? 1852]); on muddy sandflats, intertidally, common (Sh, D, K, Ch, Ca).
- 617 Fusinus cinereus (Reeve, 1847); (H).
- 618 Fusinus felipensis Lowe, 1935; on rocky reef, intertidally, common (Sh, D, Sp, Co, Ch, Ca).
- 620 Oliva incrassata (Solander, 1786); on sand flats as tide turns, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 625 Oliva spicata (Röding, 1798); sand flats, low tide, rare (2) (K, H).
- 627 Oliva undatella Lamarck, 1810; sand beach, low tide, common (Sh, D, Sp, Co, Ca, H).
- 634 Olivella dama (Wood, 1828); sand flats as tide turns, common (Sh, D, Sp, Co, K, Ch, Ca).
- 634a Olivella fletcheriae Berry, 1958; sand flats as tide turns, common (Sh, D, Sp, K, Ch).
- \*640 Olivella volutella (Lamarck, 1811); sand beach, rare (2), Central America to Ecuador (D, K).
- 645 Olivella zanoeta (Duclos, 1835); sand flats as tide turns, common (Sh, D, Sp, Co, K, H).  
Olivella sp. (D).
- 646 Mitra solitaria C. B. Adams, 1858; among rocks, low tide, uncommon (Sh, D, Sp, Ch, Ca, H).
- 656 Mitra tristis Broderip, 1836; under rocks, intertidally, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 662 Mitra sulcata Sowerby, 1825; beach specimens (D, Sp).  
Mitra fultoni; under rocks, intertidally, rare (1) (Sp).
- 667 Lyria pedersenii (Verrill, 1870); under rocks, low tide, rare (1) (Ch).



- 669 Marginella californica Tomlin, 1916; under muddy rocks, uncommon (Sh, H). Cystiscus sp. (Sh).
- 685 Cancellaria obesa Sowerby, 1832; sand spits, low tide at night, rare (4) (Sh, D, Sp, Ca).
- 693 Cancellaria cassidiformis Sowerby, 1832; sand spits, low tide, rare (2) (D, Ca).
- 710 Trigonostoma goniostoma Sowerby, 1832; rocky reef, low tide, common (Sh, D, Sp, K, Ca, H).
- 726 Knefastia funiculata (Kiener, 1838-40, ex. Valenciennes MS); rocky reef, low tide, uncommon (D, Sp).
- 727 Knefastia olivacea (Sowerby, 1833); rocky reef, low tide, common (Sh, D, Sp, Co, K, Ch, Ca).
- 753 Clavus ianthe (Dall, 1919); sand beach, low night tide, rare (6) (Sh, D, Sp, K, Ca, H).
- 758 Clavus pembertonii Lowe, 1935; dead specimen (H).
- 769 Clathrodrillia pilsbryi Lowe, 1935; dead specimens (D, Ca).
- \*770 Clathrodrillia aenone Dall, 1919; rocky reef, rare (2), Agua Verde Bay, Gulf of California (D, Sp).
- \*790 Crassispira bacchia Dall, 1919; under rocks, intertidally, rare (3), La Paz, Gulf of California (D, Sp, Ca).
- \*802 Crassispira erebus Pilsbry & Lowe, 1932; rocky reefs, low tide, uncommon, Southern Mexico to Panama (Sh, D, K, Ch, H).
- \*809 Crassispira grandimaculata (C. B. Adams, 1852); under rocks, intertidally, uncommon, Nicaragua to Panama (D, Sp, Ca).
- 815 Crassispira lucasensis (Bartsch, 1950) ? = C. kluthi Jordan, 1936; sand beach and under rocks, low tide, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 822 Crassispira nymphia Pilsbry & Lowe, 1932; under rocks, low tide, common (Sh, D, Sp, Co, K, Ch, Ca, H).
- 825 Crassispira pluto Pilsbry & Lowe, 1932; under rocks, low tide, common (Sh, D, Sp, K, Ch).
- \*839 Crassispira xanti Hertlein & Strong, 1951; rare (2), southern end of the Gulf of California to Costa Rica (Sh, Sp).
- \*840 Crassispira zonulata (Reeve, 1843); under rocks, low tide, rare (2), Nicaragua to Panama (Sp, H).
- 851a Mangelia hamata Carpenter, 1865; intertidally, rare (1) (H).
- 863a Mangelia cf. M. euryclea Dall, 1919; intertidally, rare (1) (Sp).
- Mangelia cf. M. oenoa Dall, 1919; intertidally, rare (1) (Sh).
- \*866 Mangelia subdiaphana Carpenter, 1864; intertidally, rare (1), Cape San Lucas, Gulf of California (Sp).
- \*867 Mangelia antiochroa Pilsbry & Lowe, 1932; intertidally, rare (1), Panama (H).
- 870 Mangelia cyrene Dall, 1919; intertidally, rare (1) (H).
- Mangelia doris Dall, 1919; intertidally, rare (1) (H).
- Mangelia, two species (Sh, Ch).
- \*894 Tenaturris cf. T. nereis (Pilsbry & Lowe, 1932); under rocks, low tide, rare (3), Nicaragua (Sh, Sp, Ca).
- 908 Hormospira maculosa (Sowerby, 1834); among rocky rubble, intertidally, uncommon (D, Sp, K, Ca).
- 910 Pleuroliria nobilis (Hinds, 1843); washed up by storm, alive (D).
- 922 Conus princeps Linnaeus, 1758; dead specimen (Ch).
- 926 Conus perplexus Sowerby, 1857; sand beach, low tide, uncommon (D, Ch, Ca).
- 930 Conus ximenes Gray, 1839; in coarse sand, edge of runnels, low tide, common (Sh, D, Sp, Co, K, Ca, H).
- \*948 Terebra robusta Hinds, 1844; sand beach, low tide, rare (2), Guaymas, Mexico, to Ecuador (D).
- 949 Terebra strigata Sowerby, 1825, cf. T. ornata; beach specimen (D).
- 956 Terebra armillata Hinds, 1844; muddy sand flats, intertidally, common (Sh, D, Co, Ca, H).
- \*958 Terebra cf. T. bridgesi Dall, 1908; sand beach, low night tide, uncommon (18), Panama (Sh, D, H).
- 963 Terebra glauca Hinds, 1844; sand beach, intertidally, uncommon (Sh, D, Ch).
- \*968 Terebra ligyrus Pilsbry & Lowe, 1932; sand beach, intertidally, rare (1), Guaymas, Mexico (Sp).
- 980 Terebra variegata Gray, 1834; sand beach, intertidally, common (Sh, D, Co, K, Ca, H).
- Terebra berryi Campbell, 1961; sand beach, low tide, rare (2) (D, Ca).
- 982 Bulla gouldiana Pilsbry, 1895; among rubble as tide recedes, common (Sh, D, Sp, Co, K, Ca, H).
- 986 Haminoea strongi Baker & Hanna, 1927; rare (4) (Sh, Sp, Ch, H).
- 992 Acteocina angustior Baker & Hanna, 1927; sand beach, uncommon (Sh, D, Ch).
- 994 Acteocina inculta (Gould & Carpenter, 1857); sand beach (Sh, D).

- Odostomia aepynota planicosta* Baker, Hanna, & Strong, 1928; rare (1) (Sh).  
*Odostomia*, three species (Sh).  
*Turbonilla*, three species (Sh).  
 1025 *Pedipes liratus* Binney, 1860; rare (2) (Sh, H).  
 1033 *Williamia peltoides* (Carpenter, 1864); dead specimen, rare (Ch).

## Amphineura

- 5 *Chiton virgulatus* Sowerby, 1840; under stones, intertidally, common (D, Co, H).  
*Acanthochitona* cf. *A. avicula* Carpenter, 1856; rare (1) (H).  
 9 *Acanthochitona exquisita* (Pilsbry & Lowe, 1893); crawling on rocks at night, common (D, Sp, Co, Ch, Ca, H).  
*Lepidopleurus internexus* Carpenter, 1865; under rocks (Ch).  
 27 *Callistochiton gabbi* Pilsbry, 1893; under stones, intertidally, common (H).  
 28 *Callistochiton infortunatus* Pilsbry, 1893; under stones, intertidally, uncommon (H).  
*Callistochiton palmulatus* Carpenter, 1856 (H).  
 38 *Chaetopleura euryplax* Berry, 1945; under stones, rare (D).  
 39 *Lepidozona clathrata* (Reeve, 1847); under stones and in crevices, uncommon (D, Co, H).  
 \*41 *Lepidozona serrata* (Carpenter, 1864); under stones, rare, Cape San Lucas, Baja California (H).  
 42 *Lepidozona subtilis* Berry, 1956; in crevices, intertidally, common (D, Co, H).  
 ? *Stenoplax corrugata* (Pilsbry, 1892); (H).  
 44 *Stenoplax limaciformis* (Sowerby, 1832); under stones, intertidally, common (Co, H).  
 45 *Stenoplax magdalenensis* (Hinds, 1845); under and on rocks, intertidally, common (Ch, H).  
 46 *Stenoplax mariposa* (Dall, 1919); under stones, intertidally, common (D, Co, Ch, H).  
 47 *Stenoplax conspicua sonorana* Berry, 1956; on rocks and in tidepools (H).  
 49 *Nuttallina crossota* Berry, 1956; on rocks and in tidepools (H).  
*Dendrochiton* sp. (H).

## Literature Cited

- Baker, Fred C.  
 1926. Mollusca of the family Triphoridae. Proc. Calif. Acad. Sci. ser. 4, 15 (6): 223-239; pl. 24.  
 Baker, Fred C., G Dallas Hanna, & A. M. Strong  
 1928. Some Pyramidellidae from the Gulf of California. Proc. Calif. Acad. Sci. ser. 4, 17 (7): 205-246, pls. 11-12.  
 Berry, S. Stillman  
 1960. Leaflets in Malacology 1 (19): 115-122.  
 Burch, John Q.  
 1944-1946. Distributional list of the west American marine mollusca from San Diego, California, to the Polar Sea. (Extracts from the) Min. Conch. Club Southern Calif. nos. 33 to 63.  
 Campbell, Bruce  
 1961. Four new Panamic gastropods. The Veliger 4 (1): 25-28; pl. 5.  
 Dall, William Healey  
 1919. Descriptions of new species of mollusks of the family Turritidae from the west coast of America and adjacent regions. Proc. U. S. Nat. Mus. 56 (2288): 1-86; pls. 1-24.  
 Jordan, Eric K.  
 1936. The Pleistocene fauna of Magdalena Bay, Lower California. Contr. Dept. Geo. Stanford Univ. 1 (4): 107-173; pls. 17-19.  
 Kanakoff, George P., & William K. Emerson  
 1959. Late Pleistocene invertebrates of the Newport Bay area. Los Angeles County Mus. Contr. Sci. 31: 36.  
 Keen, A. Myra  
 1958. Sea shells of tropical west America; marine mollusks from Lower California to Colombia. Stanford, Calif., Stanford Univ. Press; xi + 624 pp., illus.  
 Oldroyd, Ida Shepard  
 1925. The marine shells of the west coast of North America. Stanford Univ. Pubs., Geol. Sci. 1: 1-248; pls. 1-57.  
 1927. The marine shells of the west coast of North America. Stanford Univ. Pubs., Geol. Sci. 2 (1): 1-297, pls. 1-29.  
 1927. The marine shells of the west coast of North America. Stanford Univ. Pubs., Geol. Sci. 2 (2): 1-300; pls. 30-72.  
 1927. The marine shells of the west coast of North America. Stanford Univ. Pubs., Geol. Sci. 2 (3): 1-339; pls. 73-108.  
 Olsson, Axel A.  
 1961. Mollusks of the tropical eastern Pacific, particularly from the southern half of the Panamic Pacific faunal province (Panama to Peru). Part I. Panamic-Pacific pelecypoda. Paleont. Res. Inst. Ithaca, N. y., pp. 1-574; pls. 1-86.  
 Pilsbry, Henry A., & Axel A. Olsson  
 1945-1952. Vitrinellidae and similar gastropods of the Panamic Province.  
 Pt. I. Acad. Nat. Sci. Philadelphia 97: 249-278; pls. 22-30  
 Pt. II. *ibid.*, 104: 35-88; pls. 2-13.  
 Sphon, Gale G., Jr.  
 1961. Notes on the Mitridae of the Eastern Pacific. I. *Mitra fultoni* E. A. Smith. The Veliger 4 (1): 32 to 36; pl. 7, 1 textfig.  
 Turner, Ruth D.  
 1956. The eastern Pacific marine mollusks described by C. B. Adams. Occ. Pap. Mollusks, Mus. Comp. Zool., Harvard 2 (20): 21-135; pls. 5-11.